

CITY OF BURBANK

INSTRUMENT CONTROLS TECHNICIAN

DEFINITION

Under direction, to carry out instrument and system maintenance and repair activities in electric generating plants; and to perform other related duties as required.

ESSENTIAL FUNCTIONS

Programs, services, calibrates, troubleshoots, and repairs a variety of electronic, and pneumatic instruments, computerized equipment, and control systems; performs a variety of tests, including but not limited to, physical and chemical analysis and water treatment; operates a variety of electronic and computerized metering instruments and equipment; utilizes a variety of hand tools; operates motor vehicles; observes instruments; collects data; prepares and maintains a variety of written records both manually and electronically; operates a computer with related software; may assist in designing control and operating systems for boilers and related power plant equipment; cleans up and disposes of acids and other hazardous materials that are present and utilized by the Instrument and Controls Section.

MINIMUM QUALIFICATIONS

Employment Standards:

- Knowledge of - instrumentation; principles of electronics, physics, chemistry and mathematics; various engineering units; characteristics of electronic testing equipment; computer operation; current Programmable Logic Controller (PLC) and Human Machine Interface (HMI) platforms (e.g. Windows, Emerson Delta V software, Rockwell Automation Control Logix systems, etc.); applicable South Coast Air Quality Management District (SCAQMD), Environmental Protection Agency (EPA), and California Air Resources Board (CARB) rules, regulations, and enforcement procedures; occupational hazards and safety procedures; first aid.
- Skill in - effectively implementing the aforementioned knowledge standards; interacting and communicating tactfully and effectively with a culturally diverse population; discerning potentially dangerous situations; making independent judgements and decisions based upon standard policy or procedures.
- Ability to - read, write, and communicate in English at an appropriate level; learn, comprehend, and apply Department and City policies, rules, and regulations; perform essential functions; follow instructions and directions; write clear and accurate reports; operate a computer terminal and a variety of related software; work in and around a power generating plant, including work in confined spaces; read schematic diagrams; utilize hand tools and specialized electronic instruments; implement control strategies and modify logic tasks both in Distributive Control Systems (DCS) and PLC systems; proficient with software based DCS, specifically Emerson Delta V, Foundation Fieldbus, Citect, and Cimplicity; work with fiber-optic networks and Supervisory Control and Data Acquisition (SCADA) systems; observe instruments; safely collect and dispose of hazardous materials; safely operate motor vehicles; cope with situations calmly and tactfully; establish and maintain effective working relationships with supervisors, fellow employees, contractors, and the public.

Education/Training: Two years of college course work in any of the following concentrations: chemistry, physics, electronics, instrumentation, and/or engineering; and two years of recent instrumentation and controls field experience related to any of the following industrial processes: high pressure steam boilers, combustion turbines, industrial engines and generators, or refineries. NOTE: Additional experience may be substituted for the education requirement on a year for year basis.

Special Conditions & Requirements: Employees in this classification will be required to comply with the American National Standards Institute's requirements of Practices for Respiratory Protection. COLOR VISION: Keen Color Vision.

License & Certificates: A valid California Class "C" driver's license or equivalent at time of appointment and a valid Cardiopulmonary Resuscitation (CPR) and Basic First Aid Certificates from authorized providers, as determined by the Management Services Department within six months of appointment.

SUPPLEMENTAL INFORMATION

None.